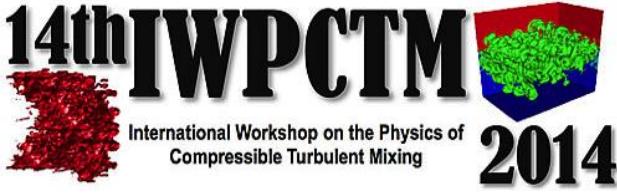


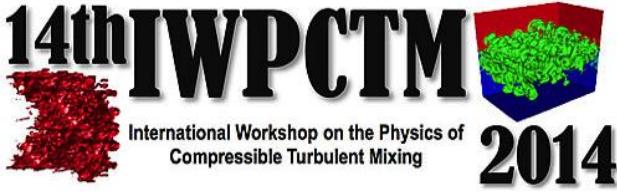
Time	Monday 9/1/2014
8:20–8:30	Welcome and Opening Remarks: O. Schilling
	<b>Rayleigh–Taylor Experiment Session I</b> Chair: M. J. Andrews ( <i>Los Alamos National Laboratory</i> )
8:30–9:20	<b>Plenary Talk: Progress with Experiments on Understanding the Rayleigh-Taylor and Richtmyer-Meshkov Driven Flows for Complex Environments</b> <u>Ranjan, D.</u> ( <i>Georgia Institute of Technology</i> )
9:20–9:45	<b>Miscible and Immiscible Experiments on the Rayleigh-Taylor Instability Using Planar Laser Induced Fluorescence Visualization</b> <u>Mokler, M.</u> , Jacobs, J. ( <i>University of Arizona</i> )
9:45–10:10	<b>Measurement of Favre-Averaged Statistics in Variable Density Mixing of Buoyant Jets</b> <u>Charonko, J.</u> , Prestridge, K. ( <i>Los Alamos National Laboratory</i> )
10:10–10:35	<b>Experiments on the Rarefaction Wave Driven Rayleigh-Taylor Instability</b> <u>Morgan, R.</u> , Jacobs, J. ( <i>University of Arizona</i> )
10:35–10:55	Break
	<b>Rayleigh–Taylor Simulation Session II</b> Chair: A. G. W. Lawrie ( <i>University of Bristol</i> )
10:55–11:20	<b>Direct Numerical Simulation (DNS) and Implicit Large Eddy Simulation (ILES) of Rayleigh-Taylor Mixing</b> <u>Youngs, D. L.</u> ( <i>Atomic Weapons Establishment</i> )
11:20–11:45	<b>The Rayleigh-Taylor Instability Driven by an Accel-Decel-Accel Profile</b> <u>Ramaprabhu, P.</u> , Karkhanis, V., Lawrie, A. ( <i>Univ. of North Carolina at Charlotte</i> , <i>Univ. of Bristol</i> )
11:45–12:10	<b>The Tilted Rocket Rig: Numerical Modelling in 2D and 3D</b> <u>Brown, M. A.</u> , Batha, C. A., Williams, R. J. R., Youngs, D. L. ( <i>Atomic Weapons Establishment</i> )
12:10–13:30	Lunch
	<b>Rayleigh–Taylor Simulation Session III</b> Chair: D. Livescu ( <i>Los Alamos National Laboratory</i> )
13:30–13:55	<b>Effect of Initial Conditions on Late-Time Evolution to Turbulence of Rayleigh Taylor Instability Under Variable Acceleration Histories</b> <u>Aslangiil, D.</u> , Lawrie, A., <u>Banerjee, A.</u> ( <i>Lehigh Univ.</i> , <i>Univ. of Bristol</i> )
13:55–14:20	<b>Rayleigh-Taylor Instability Driven by Time-Varying Acceleration</b> <u>Khan, M.</u> ( <i>Jadavpur University</i> )
14:20–14:45	<b>On the Role of a Pre-Existing Turbulent Field in the Development of a Mixing Region in the Presence of an Acceleration Field</b> <u>Movahed, P.</u> , Johnsen, E. ( <i>University of Michigan</i> )
14:45–15:10	<b>Turbulent Mixing at the Microscale</b> <u>Glimm, J.</u> ( <i>Stony Brook University</i> )
15:10–15:30	Break
	<b>Rayleigh–Taylor Simulation Session IV</b> Chair: J. G. Glimm ( <i>Stony Brook University</i> )
15:30–15:55	<b>The Internal Structure of Stratified Rayleigh-Taylor Instability</b> Davies Wykes, M., <u>Lawrie, A.</u> , Dalziel, S. ( <i>University of Cambridge</i> , <i>University of Bristol</i> )
15:55–16:20	<b>Generalized Cahn-Hilliard Navier-Stokes Equations for Numerical Simulations of Flows with Immiscible Fluids</b> <u>Li, Z.</u> , Livescu, D. ( <i>Los Alamos National Laboratory</i> )
16:20–16:45	<b>Towards Adaptive Unstructured ALE Methods for Turbulent Flows</b> <u>Lawrie, A.</u> , Nahon, J. ( <i>University of Bristol</i> )
16:45–17:10	<b>DNS Study of Compressible Turbulent Mixing by Rayleigh-Taylor Instability</b> <u>Tian, B.</u> , Zhang, Y., Li, X. ( <i>Institute of Applied Phys. and Comp. Math.</i> , <i>State Key Laboratory of High-Temperature Gas Dynamics</i> )
17:10–17:40	<b>Discussion: Rayleigh–Taylor Experiment and Simulation</b> Chairs: D. Ranjan and D. L. Youngs

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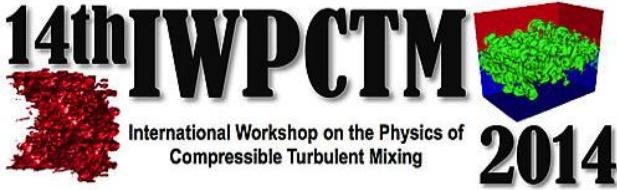
Time	Tuesday 9/2/2014
8:20–8:30	Announcements: O. Schilling
	<b>Rayleigh–Taylor and Kelvin–Helmholtz Theory and Modeling Session V</b> Chair: R. J. R. Williams ( <i>Atomic Weapons Establishment</i> )
8:30–9:20	<b>Plenary Talk: New Results and Insight into the Asymptotic Self-Similar Solutions of RT and RM Instabilities at all Dimensionalities and Density Ratios</b> Elbaz, Y., Shvarts, D. ( <i>Ben-Gurion University</i> )
9:20–9:45	<b>Spectral Modelling of Unstably Stratified Homogeneous Turbulence (USHT)</b> Grèa, B.-J., Burlot, A., Godefert, F., Cambon, C., Griffond, J., Soulard, O. ( <i>Commissariat à l'Energie Atomique, École Centrale de Lyon</i> )
9:45–10:10	<b>A Solution to Rayleigh-Taylor Instabilities: Bubbles, Spikes, and Their Scalings</b> Mikaelian, K. O. ( <i>Lawrence Livermore National Laboratory</i> )
10:10–10:35	<b>Towards a Statistical Model for KH Instability in the Compressible Regime: Numerical Calculations and Experiments</b> Shimony, A., Malamud, G., Wan, W. C., Di-Stefano, C., Elbaz, Y., Kuranz, C. C., Klein, S. R., Trantham, M. R., Keiter, P. A., Drake, R. P., Shvarts, D. ( <i>Ben-Gurion Univ., Univ. of Michigan</i> )
10:35–10:55	Break
	<b>Rayleigh–Taylor and Kelvin–Helmholtz Theory and Modeling Session VI</b> Chair: A. Llor ( <i>Commissariat à l'Energie Atomique</i> )
10:55–11:20	<b>Large-Scale Analysis of Rayleigh–Taylor Turbulence</b> Soulard, O., Griffond, J., Grèa, B.-J. ( <i>Commissariat à l'Energie Atomique</i> )
11:20–11:45	<b>Comparison of Two-Equation and Multi-Fluid Turbulence Models for Rayleigh-Taylor and Richtmyer-Meshkov Mixing</b> Drikakis, D., Kokkinakis, I. W., Youngs, D. L., Williams, R. J. R. ( <i>Cranfield University, Atomic Weapons Establishment</i> )
11:45–12:10	<b>Exact Statistical Results for Binary Mixing and Reaction in Variable Density Turbulence (VDT)</b> Ristorcelli, J. R. ( <i>Los Alamos National Laboratory</i> )
12:10–13:30	Lunch
	<b>Rayleigh–Taylor and Richtmyer–Meshkov Theory and Modeling Session VII</b> Chair: K. O. Mikaelian ( <i>Lawrence Livermore National Laboratory</i> )
13:30–13:55	<b>Progress on Multicomponent Reynolds-Averaged Navier–Stokes Model Development and Validation for Rayleigh–Taylor and Reshocked Richtmyer–Meshkov Turbulent Mixing</b> Schilling, O. ( <i>Lawrence Livermore National Laboratory</i> )
13:55–14:20	<b>A Dynamical Systems Approach to the Alpha Problem for Rayleigh-Taylor</b> Israel, D. M. ( <i>Los Alamos National Laboratory</i> )
14:20–14:45	
14:45–15:10	
15:10–15:30	Break
15:30–17:10	<b>Poster Session VIII</b>
17:10–17:40	<b>Discussion: Rayleigh–Taylor, Richtmyer–Meshkov and Kelvin–Helmholtz Theory and Modeling</b> Chairs: D. Shvarts and A. Llor
19:00–21:00	<b>Banquet: Morton's the Steakhouse</b>

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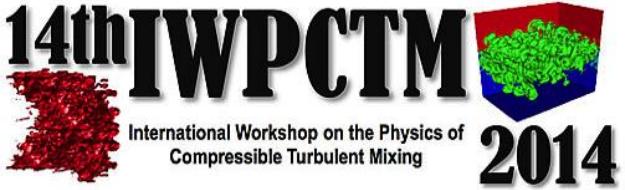
Time	Wednesday 9/3/2014
8:20–8:30	Announcements: O. Schilling
	<b>Richtmyer–Meshkov Experiment Session IX</b> Chair: K. P. Prestridge ( <i>Los Alamos National Laboratory</i> )
8:30–9:20	<b>Plenary Talk: Numerical Experiments with Shock-Turbulence Interaction: Physics and Modeling</b> <u>Lele, S. K.</u> ( <i>Stanford University</i> )
9:20–9:45	<b>Richtmyer–Meshkov Instability Shock Tube Experiments with a Quantified, Three-Dimensional, Random, Initial Perturbation</b> <u>Jacobs, J.</u> et al. ( <i>University of Arizona, Lawrence Livermore National Laboratory</i> )
9:45–10:10	<b>Simultaneous Concentration and Velocity Field Measurements in a Shock-Accelerated Mixing Layer</b> <u>Reese, D.</u> , Oakley, J., Weber, C., Rothamer, D., Navarro, J., Bonazza, R. ( <i>U. of Wisconsin, Madison</i> )
10:10–10:35	<b>Effects of Shock Strength on the Single-Interface Richtmyer–Meshkov Instability</b> <u>Wilson, B. M.</u> , Mejia-Alvarez, R., Prestridge, K. ( <i>Los Alamos National Laboratory</i> )
10:35–10:55	Break
	<b>Richtmyer–Meshkov Experiment and Simulation Session X</b> Chair: J. W. Jacobs ( <i>University of Arizona</i> )
10:55–11:20	<b>Shock-Driven Variable-Density Turbulence: New Insights</b> <u>Reilly, D.</u> , McFarland, J., Carter, J., Ranjan, D. ( <i>Georgia Institute of Technology, University of Missouri–Columbia</i> )
11:20–11:45	<b>Effects of Initial Conditions on the Evolution of Richtmyer–Meshkov Instabilities</b> <u>Mejia-Alvarez, R.</u> , Wilson, B., Prestridge, K. ( <i>Los Alamos National Laboratory</i> )
11:45–12:10	<b>3D Numerical Analysis of the RM Evolution Under Reshock Conditions</b> <u>Malamud, G.</u> , Leinov, E., Elbaz, Y., Sadot, O., Ben-Dor, G., <u>Shvarts, D.</u> ( <i>Ben-Gurion University</i> )
12:10–13:30	Lunch
	<b>Richtmyer–Meshkov Simulation Session XI</b> Chair: D. L. Youngs ( <i>Atomic Weapons Establishment</i> )
13:30–13:55	<b>Modifying Shock-Driven Turbulent Mixing Through the Spectral Content of Initial Interface Perturbations</b> <u>Nelson, N. J.</u> , Grinstein, F. F. ( <i>Los Alamos National Laboratory</i> )
13:55–14:20	<b>Reshock of Self-Similar Multimode Richtmyer–Meshkov Instability at High Atwood Number</b> <u>Probyn, M.</u> , Thornber, B., Aspden, A., Drikakis, D. ( <i>Cranfield University</i> )
14:20–14:45	<b>A Numerical Study of the Two and Three Dimensional Richtmyer Meshkov Instability</b> <u>Thornber, B.</u> , Zhou, Y. ( <i>University of Sydney, Lawrence Livermore National Laboratory</i> )
14:45–15:10	<b>Large-Eddy Simulation Requirements for the Richtmyer–Meshkov Instability</b> <u>Olson, B.</u> , Greenough, J. ( <i>Lawrence Livermore National Laboratory</i> )
15:10–15:30	Break
	<b>Richtmyer–Meshkov and Shock–Turbulence Simulation Session XII</b> Chair: S. K. Lele ( <i>Stanford University</i> )
15:30–15:55	<b>Statistics of Turbulent Mixing</b> <u>Williams, R. J. R.</u> , Batha, C. A. ( <i>Atomic Weapons Establishment</i> )
15:55–16:20	<b>DNS and LIA Analysis of the Shock-Turbulence Interaction</b> <u>Livescu, D.</u> , Ryu, J. ( <i>Los Alamos National Laboratory, University of California, Berkeley</i> )
16:20–16:45	<b>Numerical Simulations of Chemically Reacting Richtmyer–Meshkov Instability in H<sub>2</sub>-O<sub>2</sub> Flames</b> <u>Attal, N.</u> , Varshochi, H., Ramaprabhu, P. ( <i>University of North Carolina at Charlotte</i> )
16:45–17:10	<b>A Difference Scheme for Lagrangian Hydrodynamics in 2D Cylindrical Geometry</b> <u>Li, J.</u> ( <i>Institute of Applied Physics and Computational Mathematics</i> )
17:10–17:40	<b>Discussion: Richtmyer–Meshkov Experiment and Simulation</b> Chairs: R. Bonazza and B. Thornber

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Time	Thursday 9/4/2014
8:20–8:30	Announcements: O. Schilling
	<b>Richtmyer–Meshkov Theory and Modeling Session XIII</b> Chair: D. Drikakis ( <i>Cranfield University</i> )
8:30–9:20	Plenary Talk: Hydrodynamic Instability and Mix Experiments for Ignition Program on National Ignition Facility <u>Smalyuk, V. A.</u> ( <i>Lawrence Livermore National Laboratory</i> )
9:20–9:45	LES and Unsteady RANS Simulations of a Shock-Accelerated Heavy Gas Cylinder <u>Morgan, B. E.</u> , Greenough, J. A. ( <i>Lawrence Livermore National Laboratory</i> )
9:45–10:10	Multicomponent Reynolds-Averaged Navier-Stokes Simulations of Reshocked Richtmyer-Meshkov Instability and Turbulent Mixing: Mach Number and Atwood Number Effects <u>Morán-López, J. T.</u> , Schilling, O. ( <i>NNSA, Lawrence Livermore National Laboratory</i> )
10:10–10:35	Impact of Bulk Vorticity Generated by a Rippled Shock Wave on the Evolution of Richtmyer-Meshkov Instability <u>Sano, T.</u> , Nishihara, K., Wouchuk, J. G. ( <i>Osaka Univ., Univ. de Castilla-La Mancha</i> )
10:35–10:55	Break
	<b>High-Energy-Density Experiment Session XIV</b> Chair: D. S. Clark ( <i>Lawrence Livermore National Laboratory</i> )
10:55–11:20	Measurements of Gas/Shell Mix in Implosions at the National Ignition Facility Using the CD Symcap Platform <u>Casey, D.</u> et al. ( <i>LLNL, LANL, Univ. of Rochester, MIT, General Atomics, AWE</i> )
11:20–11:45	Validating Richtmyer-Meshkov and Rayleigh-Taylor Growth in National Ignition Facility Implosions <u>Peterson, J. L.</u> ( <i>LLNL</i> )
11:45–12:10	High-Energy-Density Supersonic Counterflowing Shear Experiments on OMEGA and the NIF <u>Doss, F. W.</u> et al. ( <i>Los Alamos National Laboratory</i> )
12:10–13:30	Lunch
	<b>High-Energy-Density Simulation Session XV</b> Chair: O. Schilling ( <i>Lawrence Livermore National Laboratory</i> )
13:30–13:55	Detailed 3-D Simulations of High-Convergence Ignition Implosion Experiments on the National Ignition Facility <u>Clark, D. S.</u> et al. ( <i>Lawrence Livermore National Laboratory</i> )
13:55–14:20	3D Simulations of OMEGA-Type ICF Capsules <u>Haines, B. M.</u> , Grinstein, F. F., Fincke, J. R. ( <i>LANL</i> )
14:20–14:45	2D Simulations of CD Mix Capsules <u>Pino, J.</u> et al. ( <i>Lawrence Livermore National Laboratory</i> )
14:45–15:10	Some Recent Studies of Hydrodynamic Instabilities Relative to Ignition Implosion <u>Ye, W.</u> , Wu, J., Wang, L., Liu, W., Guo, H. ( <i>Institute of Applied Physics and Computational Mathematics</i> )
15:10–15:30	Break
	<b>High-Energy-Density Theory and Modeling Session XVI</b> Chair: W. Ye ( <i>Institute of Applied Physics and Computational Mathematics</i> )
15:30–15:55	Modeling Ablation Front Instabilities and Mixing in ICF <u>Weber, C.</u> , Clark, D., Cook, A., Robey, H. ( <i>Lawrence Livermore National Laboratory</i> )
15:55–16:20	Effects of Instabilities and Adiabat in NIF Experiments <u>Cheng, B.</u> ( <i>Los Alamos National Laboratory</i> )
16:20–16:45	Plasma Transport in RT and KH Instabilities (ICF Conditions) <u>Haines, B.</u> , <u>Vold, E.</u> , Molvig, K., Rauenzahn, R., Aldrich, C. ( <i>Los Alamos National Laboratory</i> )
16:45–17:10	Discussion: HED Experiment, Simulation and Modeling
17:10–17:40	Chair: V. Smalyuk

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Time	Friday 9/5/2014
8:20–8:30	Announcements: O. Schilling
	<b>Strength, Ejecta, Particulate and EOS Session XVII</b> Chair: A. Banerjee ( <i>Lehigh University</i> )
8:30–8:55	<b>Viscous Rayleigh-Taylor Instability Experiments Using Elastic-Plastic Materials</b> Roach, P., Polavarapu, R., <u>Banerjee, A.</u> ( <i>Lehigh University</i> )
8:55–9:20	<b>The Effect of Multiple Shocks on Ejecta Production</b> <u>Grieves, B.</u> ( <i>Atomic Weapons Establishment</i> )
9:20–9:45	<b>Numerical Simulation of Explosive Dispersal of Particles in Cylindrical Geometry</b> Annamalai, S., Neal, C., Ouellet, F., <u>Rollin, B.</u> , Jackson, T. J., Balachandar, S. ( <i>University of Florida</i> )
9:45–10:10	<b>Experimental Acceleration Histories in a Shocked Multiphase Flow</b> <u>Orlicz, G.</u> , Martinez, A., Prestridge, K. ( <i>Los Alamos National Laboratory</i> )
10:10–10:35	<b>Equation of State for n-Component Mixture</b> <u>Shi, Y.</u> ( <i>Institute of Applied Physics and Computational Mathematics</i> )
10:35–10:55	Break
10:55–11:45	<b>Summary Discussion Session</b> Session Chairs et al.
11:45	<b>Closing remarks</b> O. Schilling

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